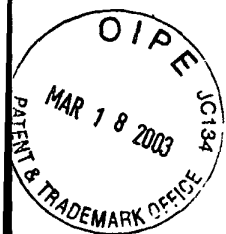


Figure 1(a)-1



1	CCTCTCTGTTTCGTTCCCTCGTAGACGAAGAAGAAGAAGAATCTCA	
46	GGTTTTAGCTTTTCGAAGCTTCCAAAATTTTGAATTTTGATCTTCT	
91	GGGCTCTTTTGTAAATCAGACTGAAGATATTTAGATTACCCAGAA	
136	GTTGTTCAAGGAATGGTTTCAGTGGACAGCACGGAAAGATAAAAG	
181	AGACTTTTTTTTCCAGATTTTGCTGATCCAAAATCTGAATAGTTG	
226	TTCATGTTCTTGGATCAAATCTGGAAAGAGGAAGTTTGTGGATC	
271	TAGAAGAAGATAACAATGTTGGATTCTCTAGTGTCGAAACTGCCT	
	M L D S L V S K L P	10
316	TCGTTATCGACATCTGATCACGCTTCTGTGGTTGCGTTGAATCTC	
	S L S T S D H A S V V A L N L	25
361	TTTGTTGCACTTCTTTGTGCTTGTATTGTTCTTGGTCATCTTTTG	
	F V A L L C A C I V L G H L L	40
406	GAAGAGAATAGATGGATGAACGAATCCATCACCGCCTTGTTGATT	
	E E N R W M N E S I T A L L I	55
451	GGGCTAGGCACTGGTGTACCATTTTGTGATTAGTAAAGGAAAA	
	G L G T G V T I L L I S K G K	70
496	AGCTCGCATCTTCTCGTCTTTAGTGAAGATCTTTTCTTCATATAT	
	S S H L L V F S E D L F F I Y	85
541	CTTTTGCCACCCATTATATTCAATGCAGGGTTTCAAGTAAAAAAG	
	L L P P I I F N A G F Q V K K	100
586	AAGCAGTTTTTCCGCAATTTTCGTGACTATTATGCTTTTTTGGTGCT	
	K Q F F R N F V T I M L F G A	115
631	GTTGGGACTATTATTTCTTGCACAATCATATCTCTAGGTGTAACA	
	V G T I I S C T I I S L G V T	130
676	CAGTTCTTTAAGAAGTTGGACATTGGAACCTTTGACTTGGGTGAT	
	Q F F K K L D I G T F D L G D	145
721	TATCTTGCTATTGGTGCCATATTTGCTGCAACAGATTCAGTATGT	
	Y L A I G A I F A A T D S V C	160
766	AACTGCAGGTTCTGAATCAAGACGAGACACCTTTGCTTTACAGT	
	T L Q V L N Q D E T P L L Y S	175
811	CTTGATTTCGGAGAGGGTGTGTGAATGATGCAACGTCAGTTGTG	
	L V F G E G V V N D A T S V V	190
856	GTCTTCAACGCGATTTCAGAGCTTTGATCTCACTCACCTAAACCAC	
	V F N A I Q S F D L T H L N H	205
901	GAAGCTGCTTTTCATCTTCTTGGAAACTTCTTGTATTTGTTTCTC	
	E A A F H L L G N F L Y L F L	220
946	CTAAGTACCTTGCTTGGTGCTGCAACCGGTCTGATAAGTGCGTAT	

Figure 1(a)-2



	L S T L L G A A T G L I S A Y	235
991	GTTATCAAGAAGCTATACTTTGGAAGGCACTCAACTGACCGAGAG	
	V I K K L Y F G R H S T D R E	250
1036	GTTGCCCTTATGATGCTTATGGCGTATCTTTCTTATATGCTTGCT	
	V A L M M L M A Y L S Y M L A	265
1081	GAGCTTTTTCGACTTGAGCGGTATCCTCACTGTGTTTTTCTGTGGT	
	E L F D L S G I L T V F F C G	280
1126	ATTGTGATGTCCCATTAACACATGGCACAAATGTAACGGAGAGCTCA	
	I V M S H Y T W H N V T E S S	295
1171	AGAATAACAACAAAGCATACCTTTGCAACTTTGTCAATTTCTTGCG	
	R I T T K H T F A T L S F L A	310
1216	GAGACATTTATTTTCTTGTATGTTGGAATGGATGCCTTGGACATT	
	E T F I F L Y V G M D A L D I	325
1261	GACAAGTGGAGATCCGTGAGTGACACACCGGGAACATCGATCGCA	
	D K W R S V S D T P G T S I A	340
1306	GTGAGCTCAATCCTAATGGGTCTGGTCATGGTTGGAAGAGCAGCG	
	V S S I L M G L V M V G R A A	355
1351	TTCGTCTTTCCGTTATCGTTTCTATCTAACTTAGCCAAGAAGAAT	
	F V F P L S F L S N L A K K N	370
1396	CAAAGCGAGAAAATCAACTTTAACATGCAGGTTGTGATTGTTGGTGG	
	Q S E K I N F N M Q V V I W W	385
1441	TCTGGTCTCATGAGAGGTGCTGTATCTATGGCTCTTGCATACAAC	
	S G L M R G A V S M A L A Y N	400
1486	AAGTTTACAAGGGCCGGGCACACAGATGTACGCGGGAATGCAATC	
	K F T R A G H T D V R G N A I	415
1531	ATGATCACGAGTACGATAACTGTCTGTCTTTTGTAGCACAGTGGTG	
	M I T S T I T V C L F S T V V	430
1576	TTTGGTATGCTGACCAAACCACTCATAAGCTACCTATTACCGCAC	
	F G M L T K P L I S Y L L P H	445
1621	CAGAACGCCACCACGAGCATGTTATCTGATGACAACACCCCAAAA	
	Q N A T T S M L S D D N T P K	460
1666	TCCATACATATCCCTTTGTTGGACCAAGACTCGTTCATTGAGCCT	
	S I H I P L L D Q D S F I E P	475
1711	TCAGGGAACCACAATGTGCCTCGGCCTGACAGTATACGTGGCTTC	
	S G N H N V P R P D S I R G F	490
1756	TTGACACGGCCCACTCGAACCGTGCATTACTACTGGAGACAATTT	
	L T R P T R T V H Y Y W R Q F	505



Figure 1(a)-3

1801	GATGACTCCTTCATGCGACCCGTCTTTGGAGGTCGTGGCTTTGTA	
	D D S F M R P V F G G R G F V	520
1846	CCCTTTGTTCCAGGTTCTCCAAGTGAAGAGAAACCCTCCTGATCTT	
	P F V P G S P T E R N P P D L	535
1891	AGTAAGGCTTGAGGGTAACGTGGAAGAAAAGCTTTGATTTTTTTT	
	S K A	538
1936	GGTAGAAAAGGGTGATTCAAATTATGCTTTTGTGTAAATTATCCA	
1981	TTTGTAATATTGTTTGTGAGGACAGAAATCTGTCCTAACGTTTTG	
2026	AGAGCAGAAAGCAAAACATGGCAACTTTGAAGTGTTTGATTGATG	
2071	TATGTAATTATATTCATATTTGTTTTGTTGTAACACAACTACAC	
2116	ATTTGTTTATGTTTTGAATTTGGTTTTTGCTTCGAAAAAAAAAAAA	
2161	AAAAAAAAAAAAAAAAAAAA	

Figure 1(b)-1



1 TCTTCGTTT GCGATTGGTGT TTTTCAA AATCGACGAAATCGAAAAC
46 ATTATCGAGTGAAAAATGAGTATCGGATTAACAGAGTTTGTGACG
M S I G L T E F V T 10
91 AATAAACTAGCAGCTGAGCATCCTCAGGTGATACCAATCTCAGTG
N K L A A E H P Q V I P I S V 25
TTCATCGCCATTCTCTGTCTATGTTTAGTTATCGGCCACTTGCTT
46 F I A I L C L C L V I G H L L 40
181 GAAGAGAATCGATGGGTAAATGAATCTATTACCGCCATTTTAGTA
E E N R W V N E S I T A I L V 55
226 GGAGCAGCATCAGGAACAGTGATCTTACTTATTAGTAAAGGAAAA
G A A S G T V I L L I S K G K 70
271 AGTTCACATATTTTGGTGT TTTGATGAAGAACTCTTCTTCATTTAC
S S H I L V F D E E L F F I Y 85
316 CTTCTTCCTCCAATAATCTTCAATGCTGGGTTC AAGTTAAGAAA
L L P P I I F N A G F Q V K K 100
361 AAGAAGTTTTTTT CACAAC TTTTAAACCATCATGTCCTTTGGTGTG
K K F F H N F L T I M S F G V 115
406 ATTGGAGTTTTTCATCTCCACTGTCATTATCTCGTTTGGGACTTGG
I G V F I S T V I I S F G T W 130
451 TGGCTGTTTCCCAAGTTGGGATTTAAGGGGTTGAGTGCTAGAGAC
W L F P K L G F K G L S A R D 145
496 TATCTTGCCATAGGAACGATTTTCTCATCAACTGATACTGTTTGC
Y L A I G T I F S S T D T V C 160
541 ACTCTACAGATTCTCCATCAAGATGAAACACCATTGCTATACAGC
T L Q I L H Q D E T P L L Y S 185
586 TTAGTCTTTGGAGAAGGAGTGGTGAATGATGCAACCTCAGTTGTA
L V F G E G V V N D A T S V V 195
631 CTGTTCAACGCCGTGCAAAAGATTCAATTTGAAAGCCTAACCGGT
L F N A V Q K I Q F E S L T G 205
676 TGGACGGCGCTGCAAGTATTTGGGAAC TTTTGTACCTCTTCTCA
W T A L Q V F G N F L Y L F S 220
721 ACAAGCACACTTCTCGGAATTGGTGTGGGGCTAATAACATCTTTT
T S T L L G I G V G L I T S F 235
766 GTTCTTAAAACCTTGTATTTTGAAGACATTCTACTACACGCGAA
V L K T L Y F G R H S T T R E 250
811 CTCGCCATCATGGTTCTAATGGCTTACCTTTCATATATGTTGGCT
L A I M V L M A Y L S Y M L A 265

Figure 1(b)-2

856 GAGCTCTTCTCATTAAGTGGAAATTCTTACTGTTTTCTTCTGTGGT
E L F S L S G I L T V F F C G 280
901 GTTTTAATGTCGCATTATGCATCATATAACGTGACAGAGAGCTCA
V L M S H Y A S Y N V T E S S 295
946 AGAATCACTTCCAGGCATGTATTTGCAATGTTGTCCTTTATTGCG
R I T S R H V F A M L S F I A 310
991 GAGACATTCATATTTCTGTATGTTGGAACAGATGCTCTTGATTTT
E T F I F L Y V G T D A L D F 325
1036 ACAAAGTGG AAGACAAGCAGCTTAAGCTTTGGGGGTACTCTGGGT
T K W K T S S L S F G G T L G 340
1081 GTCTCCGGTGT CATAACCGCATTAGTATTGCTTGGACGAGCAGCA
V S G V I T A L V L L G R A A 355
1126 TTTGTCTTTCCACTCTCGGTCTTAACAAATTTTCATGAACAGGCAC
F V F P L S V L T N F M N R H 370
1171 ACTGAAAGAAACGAGTCTATCACATTTAAGCATCAGGTGATCATT
T E R N E S I T F K H Q V I I 385
1216 TGGTGGGCAGGTCTAATGCGAGGTGCTGTCTCAATTGCTCTGGCT
W W A G L M R G A V S I A L A 400
1261 TTCAAGCAGTTCACATACTCCGGTGTTACATTGGATCCTGTGAAT
F K Q F T Y S G V T L D P V N 415
1306 GCTGCCATGGTCACCAACACCCTATCGTTGTTCTCTTTACTACA
A A M V T N T T I V V L F T T 430
1351 CTGGTCTTTGGTTTTCCTCACAAAACCACTTGTGAATTATCTCCTT
L V F G F L T K P L V N Y L L 445
1396 CCTCAAGATGCAAGTCACAACACCGGAAATAGAGGTAAACGCACT
P Q D A S H N T G N R G K R T 460
1441 GAGCCAGGTTCTCCGAAAGAAGATGCGACACTTCCTCTTCTTTCC
E P G S P K E D A T L P L L S 475
1486 TTTGACGAGTCTGCTTCCACCACTTCAATAGAGCTAGAGATAGT
F D E S A S T N F N R A R D S 490
1531 ATTTCCCTTCTGATGGAACAACCTGTGTACACCATCCACCGCTAC
I S L L M E Q P V Y T I H R Y 505
1576 TGGAGAAAGTTTGACGACACATACATGAGGCCTATCTTCGGTGGA
W R K F D D T Y M R P I F G G 520
1621 CCTCGTCGAGAAAACCAACCAGAATGCTAGAATTGATCCGGGTTC
P R R E N Q P E C 529
1666 TCCGCGGGGAAATCATGATGAGTTAGTTTTTTTTTATAGTCAAGAA

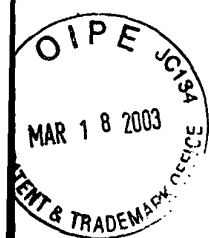


Figure 1(b)-3



1711 AGTAGGATAGTTGGTTTAGCTAAAACAGTTTCTTAAAGTTTTTGT
1756 TAAATGTATACAACAAGGTTCTTCTATATACGC

Figure 1 (c)-1



(i)

1	ACAAAAGCTGGAGCTCCACCGCGGTGGCGGCCGCTCTAGAACTAG	
46	TGGATCCCCCGGGCTGCAGGAATTCGCGGCCGCCTCGGCCATGTC	
	R A A G I R G R L G H V	12
91	CTCCGCCGTCATCGATTCCACTATCTTCCTGAAGCCAGCGGTTTCG	
	L R R H R F H Y L P E A S G S	27
136	CTTCTCATTGGTTTAATCGTCGGTATACTTGCTAATATCTCCGAC	
	L L I G L I V G I L A N I S D	42
181	ACTGAGACTAGCATTAGGACGTGGTTTAATTTCCACGAAGAGTTC	
	T E T S I R T W F N F H E E F	57
226	TTCTTCTTGTTTTTGTTCCTCCCATCATATTCCAGTCAGGTTTC	
	F F L F L L P P I I F Q S G F	72
271	AGTCTTCAACCTAAACCATTCTTTTCTAACTTTGGAGCCATTGTT	
	S L Q P K P F F S N F G A I V	87
316	ACCTTTGCTATCATCGGAACCTTTTGTGCTTCAGTTGTTACTGGT	
	T F A I I G T F V A S V V T G	102
361	GGTCTGGTTTATCTTGGCGGCTCTATGTATCTCATGTATAAACTT	
	G L V Y L G G S M Y L M Y K L	117
406	CCCTTTGTTGAGTGTCTTATGTTTGGTGCACCTTATATCAGCTACG	
	P F V E C L M F G A L I S A T	132
451	GACCCTGTCACTGTACTCTCTATATTCCAGGATGTGGGCACCGAT	
	D P V T V L S I F Q D V G T D	147
496	GTTAACCTGTATGCTTTGGTCTTTGGAGAATCAGTTCTGAATGAT	
	V N L Y A L V F G E S V L N D	162
541	GCTATGGCAATATCATTGTACAGAACAATGTCCTTAGTAAACCGC	
	A M A I S L Y R T M S L V N R	177
586	CAGTCCTCGTCTGGGGAACATTTTTCATGGTGGTGATCAGGTTTT	
	Q S S S G E H F S	186
631	TTGAGACTTTGCTGGCTCAATGTCGCAGGGGTGGGGTTGGATTTC	
676	ACTTCAGCTTAATATCCTCCTCGATCCTCCTATTTCTTA	

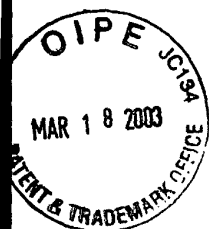
Figure 1(c)-2



(ii)

1	GGACTTCGAGGGCCATGGCATTGCACTTGCACTTCAATACTTCA	
46	TGATCTACCAGAGGTCACGGCCCAATCATCTTTTACTGCACCACA	
	T R G H G P I I F Y C T T	13
91	ACTATTGTTGTTGTCACGGTTTTACTAATAGGAGGTTGACAGGT	
	T I V V V T V L L I G G S T G	28
136	AAAATGTTGGAAGCTTTGGAAGTTGTAGGTGACGATCTTGATGAC	
	K M L E A L E V V G D D L D D	43
181	TCCATGTCTGAAGGCTTTGAAGAGAGCGATCATCAGTATGTCCCT	
	S M S E G F E E S D H Q Y V P	58
226	CCTCCTTTTAGCATTGGAGCTTCATCTGACGAGGATACATCATCA	
	P P F S I G A S S D E D T S S	73
271	TCAGGAAGCAGGTTCAAGATGAAGCTGAAGGAGTTTCACAAAACC	
	S G S R F K M K L K E F H K T	88
316	ACTACATCATTCACCGCGTTGGACAAAACTTTCTGACTCCGTTC	
	T T S F T A L D K N F L T P F	103
361	TTCACAATAATAGTGGAGGTGGAGATGGAGATGGGGAGTAGCAT	
	F T T N S G G G D G D	114
406	GGAAAAGATGTGGAT	

Figure 1(d)-1



1	CGCCACGACCCTCAGGGCCAGGTTAAGCAGCAGCAAGCGGCCGGC	
46	GTTGGTATACTGCTTCAGATTATGATGCTCGTGCTTTCCTTCGTT	
	M M L V L S F V	8
91	CTCGGCCATGTCCTCCGCCGTCATCGATTCCACTATCTTCCTGAA	
	L G H V L R R H R F H Y L P E	23
136	GCCAGCGGTTTCGCTTCTCATTGGTTTAATCGTCGGTATACTTGCT	
	A S G S L L I G L I V G I L A	38
181	AATATCTCCGATACTGAGACTAGCATTAGGACGTGGTTTAATTTTC	
	N I S D T E T S I R T W F N F	53
226	CACGAAGAGTTCTTCTTCTTGTGTTTTGTTGCCTCCCATCATATTC	
	H E E F F F L F L L P P I I F	68
271	CAGTCAGGTTTCAGTCTTCAACCTAAACCATTCTTTTCTAACTTT	
	Q S G F S L Q P K P F F S N F	83
316	GGAGCCATTGTTACCTTTGCTATCATCGGAACCTTTGTCGCTTCA	
	G A I V T F A I I G T F V A S	98
361	GTTGTTACTGGTGGTCTGGTTTATCTTGGCGGCTCTATGTATCTC	
	V V T G G L V Y L G G S M Y L	113
406	ATGTATAAACTTCCCTTTGTTGAGTGTCTTATGTTTGGTGCACTT	
	M Y K L P F V E C L M F G A L	128
451	ATATCAGCTACGGACCCTGTCACTGTACTCTCTATATTCCAGGAT	
	I S A T D P V T V L S I F Q D	143
496	GTGGGCACCGATGTTAACCTGTATGCTTTGGTCTTTGGAGAATCA	
	V G T D V N L Y A L V F G E S	158
541	GTTCTGAATGATGCTATGGCAATATCATTGTACAGAACAATGTCC	
	V L N D A M A I S L Y R T M S	173
586	TTAGTAAACCGCCAGTCCTCGTCTGGGGAACATTTTTTTCATGGTG	
	L V N R Q S S S G E H F F M V	188
631	GTGATCAGGTTTTTTGAGACTTTTGCTGGCTCAATGTCTGCAGGG	
	V I R F F E T F A G S M S A G	203
676	GTTGGGGTTGGATTCACCTTCAGCTTTACTCTTTAAGTATGCAGGA	
	V G V G F T S A L L F K Y A G	218
721	TTGGACACCGAGAATCTTCAGAACTTGGAGTGTTGTCTCTTTGTA	
	L D T E N L Q N L E C C L F V	233
766	CTTTTCCCGTATTTTTTCATACATGCTTGCAGAAGGTGTTGGTCTC	
	L F P Y F S Y M L A E G V G L	248
811	TCCGGCATTGTTTCTATACTCTTCACAGGAATTGTTATGAAGCGC	
	S G I V S I L F T G I V M K R	263

Figure 1(d)-2



856 TACACTTTCTCAAATCTCTCAGAAGCTTCACAGAGTTTCGTATCT
Y T F S N L S E A S Q S F V S 278
901 TCTTTTTTTTCACTTGATATCTTCGCTAGCAGAACTTTACGTTTC
S F F H L I S S L A E T F T F 293
946 ATTTACATGGGATTTGATATTGCCATGGAGCAGCATAGCTGGTCC
I Y M G F D I A M E Q H S W S 308
991 CATGTTGGGTTTATCCTTTTCTCTATTGTATCCTCATTTACTGAT
H V G F I L F S I V S S F T D 323
1036 CGTCAGTGATTGTATGCAGTGGCTGTCAATGTATTTGGGTGTGCA
R Q 325
1081 TATTTGGTCAACCTATTTAGACAGGAGAACCAGAAGATACCTATG
1126 AAGCACCAAAAAGCCCTTTGGTATAGTGGACTTCGAGGGGCAATG
1171 GCATTTGCACTTGCACTTCAATCACTTCATGATCTACCAGAGGGT
1216 CACGGCCAAATCATCTTTACTGCAAACCACAACCTATTGTTGTTGT
1261 CACGGTTTTACTAATAGGAGGTTTCGACAGGTAAAATGTTGGAAGC
1306 TTTGGAAGTTGTAGGTGACGATCTTGATGACTCCATGTCTGAAGG
1351 CTTTGAAGAGAGCGATCATCAGTATGTCCCTCCTCCTTTTAGCAT
1396 TGGAGCTTCATCTGACGAGGATACATCATCATCAGGAAGCAGGTT
1441 CAAGATGAAGCTGAAGGAGTTTCACAAAACCACTACATCATTCAC
1486 CGCGTTGGACAAAAACTTTCTGACTCCGTTCTTCACAACCTAATAG
1531 TGGAGATGGAGATGGAGATGGGGAGTAGCATGGAAAAGATGTGTA
1576 TTTGTGGTCCAGGCCAAGCTATAATTAGAGTACACATATGTCTAT
1621 GTAAGATTAACACTGGTTGATTTTACCTCTCGCAAAATGCCCCACT
1666 ATAAAGTTGACGATTTCC

Figure 1(e)-1



1 CAGGGCCAGGTTAAGCAGCAGCAAGCGGCCGGCGTTGGTATACTG
46 CTTCAGATTATGATGCTCGTGCTTTCCTTCGTTCTCGGCCATGTC
M M L V L S F V L G H V 12
91 CTCCGCCGTCATCGATTCCACTATCTTCCTGAAGCCAGCGGTTTCG
L R R H R F H Y L P E A S G S 27
136 CTTCTCATTGGTTTAAATCGTCGGTATACTTGCTAATATCTCCGAT
L L I G L I V G I L A N I S D 42
181 ACTGAGACTAGCATTAGGACGTGGTTTAATTTCCACGAAGAGTTC
T E T S I R T W F N F H E E F 75
226 TTCTTCTTGTTTTTGTGCTCCCATCATATTCCAGTCAGGTTTC
F F L F L L P P I I F Q S G F 90
271 AGTCTTCAACCTAAACCATTCTTTTCTAACTTTGGAGCCATTGTT
S L Q P K P F F S N F G A I V 105
316 ACCTTTGCTATCATCGGAACCTTTTGTGCTTCAGTTGTTACTGGT
T F A I I G T F V A S V V T G 120
361 GGTCTGGTTTATCTTGGCGGCTCTATGTATCTCATGTATAAACTT
G L V Y L G G S M Y L M Y K L 135
406 CCCTTTGTTGAGTGTCTTATGTTTGGTGCACCTTATATCAGCTACG
P F V E C L M F G A L I S A T 150
451 GACCCTGTCACTGTACTCTCTATATTCCAGGATGTGGGCACCGAT
D P V T V L S I F Q D V G T D 165
496 GTTAACCTGTATGCTTTGGTCTTTGGAGAATCAGTTCTGAATGAT
V N L Y A L V F G E S V L N D 180
541 GCTATGGCAATATCATTGTACAGAACAATGTCCTTAGTAAACCGC
A M A I S L Y R T M S L V N R 195
586 CAGTCCTCGTCTGGGGAACATTTTTTCATGGTGGTGATCAGGTTT
Q S S S G E H F F M V V I R F 210
631 TTTGAGACTTTTGCTGGCTCAATGTCTGCAGGGGTTGGGGTTGGA
F E T F A G S M S A G V G V G 225
676 TTCACTTCAGCTTTAATATCCTTCCTCGAATCCTCTATTTTTCTT
F T S A L I S F L E S S I F L 240
721 ATTAGATGTCACATGGCCAAAATGTATTGTAAAATCTTAACTCA
I R C H M A K N V L 255
766 GAACACCTCTTTAAGTATGCAGGATTGGACACCGAGAATCTTCAG
811 AACTTGGAGTGTGTCTCTTTGTACTTTTCCCGTATTTTTTCGTAA
856 GTAGACAAAACAACTCTCCTCCTGTCTCTTCGTATTTATGACAAC
901 ACTTCTTCCCCCTAATGTATTCTGGTTATTCTGTAAGATACATGC

Figure 1(e)-2



946 TTGCAGAAGGTGTTGGTCTCTCCGGCATTGTTTCTATACTCTTCA
991 CAGGAATTGTAATCGCCGAGTCATTGTAGCTTTTACATCTTAGTT
1036 GATGTTAATATCTTGGAAAGACATATTTAGGCTGCCTAATATAGT
1081 GCTACTGTAGGTTATGAAGCGCTACACTTTCTCAAATCTCTCAGA
1126 AGCTTCACAGAGTTTCGTATCTTCTTTTTTTTCACTTGATATCTTC
1171 GCTAGCAGAACTTTACGTTTACATTTTACATGGGATTTGATATTGC
1216 CATGGAGCAGCATAGCTGGTCCCATGTTGGGTTTATCCTTTTCTC
1261 TATTGTATCCTCATTTACTGATCGTCAGTGATTGTATGCAGTGTT
1306 AGTCAGTGTTGTAAATCCTTGACTTTACCTTTTGCTTCTGCGTTT
1351 CATGACTGACATCAGTTGTTTATTGGCGTGGCTAGGTGACTAAAT
1396 GCTTTTTTATCCTGGCTGATCGCTTCATTATCACCATGGTTTTTCG
1441 ATTCGGATTTACCTATATGTTCTGCAATGCTTTTCTCACGCAGGG
1486 CTGTCAATGTATTTGGGTGTGCATATTTGGTCAACCTATTTAGAC
1531 AGGAGAACCAGAAGATACCTATGAAGCACCAAAAAGCCCTTTGGT
1576 ATAGTGGACTTCGAGGGGCAATGGCATTGCACTTGCACTTCAAT
1621 CACTTCATGATCTACCAGAGGGTCACGGCCAAATCATCTTTACTG
1666 CAACCACAACCTATTGTTGTTGTCACGGTTTTACTAATAGGAGGTT
1711 CGACAGGTAAAATGTTGGAAGCTTTGGAAGTTGTAGGTGACGATC
1756 TTGATGACTCCATGTCTGAAGGCTTTGAAGAGAGCGATCATCAGT
1801 ATGTCCCTCCTCCTTTTAGCATTGGAGCTTCATCTGACGAGGATA
1846 CATCATCATCAGGAAGCAGGTTCAAGATGAAGCTGAAGGAGTTTC
1891 ACAAACCACTACATCATTCACCGCGTTGGACAAAACTTTCTGA
1936 CTCCGTTCTTCACAACCTAATAGTGGAGATGGAGATGGAGATGGGG
1981 AGTAGCATGGAAAAGATGTGTATTTGTGGTCCAGGCCAAGCTATA
2026 ATTAGAGTACACATATGTCTATGTAAGATTAACACTGGTTGATTT
2071 TACCTCTCGCAAAATGCCCACTATAAAGTTGACGATTTCCAAGAC
2116 ATTTCGA

[illegible]



Figure 2(a)-2

ANHX1	- - HLNHE	AA	F	HL	GN	F	LY	LF	LL	ST	LL	GG	AA	T	G	LI	S	A	Y	V	I	K	K	239																		
ScNHX1	- - P	ATFS	SV	F	EG	AG	L	FL	MT	F	SV	SL	L	I	G	V	L	I	G	V	L	I	K	H	284																	
HsNHE6	S	HTFD	V	T	A	M	F	K	S	T	G	I	F	L	G	I	F	S	G	S	F	A	M	G	A	A	T	G	V	T	A	L	V	T	K	F	319					
CeNHE1	S	E	A	I	T	L	Q	D	F	G	S	A	I	A	G	F	A	G	V	F	F	G	S	L	M	L	G	F	M	I	G	C	M	N	A	F	L	T	K	M	234	
ANHX1	L	Y	F	G	R	H	S	T	D	R	E	V	A	L	M	M	L	M	A	Y	L	S	Y	M	L	A	E	L	F	D	L	S	G	I	L	T	V	F	F	C	279	
ScNHX1	T	H	I	R	-	R	Y	P	Q	I	E	S	C	L	I	L	L	I	A	Y	E	S	Y	F	F	S	N	G	C	H	M	S	G	I	V	S	L	L	F	C	323	
HsNHE6	T	K	L	R	-	E	F	Q	L	L	E	T	G	L	F	F	L	M	S	W	S	T	F	L	L	A	E	A	W	G	F	T	G	V	V	A	V	L	F	C	358	
CeNHE1	T	L	I	S	-	E	H	A	L	L	E	S	S	L	F	V	L	I	S	Y	I	S	F	L	V	A	E	V	C	G	L	T	G	I	V	S	V	L	F	C	273	
ANHX1	G	I	V	M	S	H	Y	T	W	H	N	V	T	E	S	S	R	I	T	T	K	H	T	F	A	T	L	S	F	L	A	E	T	F	I	F	L	Y	V	G	319	
ScNHX1	G	I	T	L	K	H	Y	A	Y	Y	N	N	M	S	R	R	S	Q	I	T	K	Y	I	F	Q	L	L	A	R	L	S	E	N	F	I	F	I	Y	L	G	363	
HsNHE6	G	I	T	Q	A	H	Y	T	Y	N	N	L	S	T	E	S	Q	H	R	T	K	Q	L	F	E	L	L	N	F	L	A	E	N	F	I	F	S	Y	M	G	398	
CeNHE1	G	I	A	Q	A	H	Y	T	Y	N	N	L	S	D	E	S	Q	S	N	T	K	H	F	F	H	M	V	S	F	I	M	E	S	F	I	F	C	Y	I	G	313	
ANHX1	M	D	A	L	D	I	D	K	W	R	S	V	S	D	T	P	G	T	S	I	A	V	S	S	I	L	M	G	L	V	M	V	G	R	A	A	F	V	F	P	359	
ScNHX1	L	E	-	-	-	-	-	-	-	-	L	F	T	E	V	E	L	V	Y	K	P	L	L	I	I	V	A	A	I	S	I	C	V	A	R	W	C	A	V	F	P	396
HsNHE6	L	T	-	-	-	-	-	-	-	-	L	F	T	F	Q	N	H	V	F	N	P	T	F	V	V	G	A	F	V	A	I	F	L	G	R	A	A	N	I	Y	P	431
CeNHE1	V	S	-	-	-	-	-	-	-	-	V	F	V	T	N	N	Q	R	W	S	F	S	F	L	L	F	S	L	I	S	I	T	A	S	R	A	L	F	V	Y	P	346
ANHX1	L	S	F	L	S	N	L	A	K	K	N	Q	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	384	
ScNHX1	L	S	Q	F	V	N	W	I	Y	R	V	K	T	I	R	S	M	S	G	I	T	G	E	N	I	S	V	P	D	E	I	P	Y	N	Y	Q	M	T	F	436		
HsNHE6	L	S	L	L	N	L	G	R	R	-	S	K	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	453	
CeNHE1	L	S	W	L	L	N	I	R	R	R	P	K	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	368	
ANHX1	W	S	G	L	M	R	G	A	V	S	M	A	L	A	Y	N	K	F	T	R	A	G	H	T	D	V	R	G	N	A	I	M	I	T	S	T	I	T	V	C	424	
ScNHX1	W	A	G	L	R	-	G	A	V	G	V	V	A	L	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	468
HsNHE6	F	A	G	L	R	-	G	A	M	A	-	F	A	L	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	486	
CeNHE1	F	A	G	L	R	-	G	A	M	A	-	F	A	L	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	401	

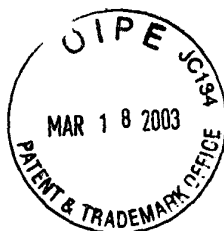


Figure 2(a)-3

ANHX1	461	D	---	DN	TP	KS	477
ScNHX1	504	S	---	---	---	---	525
HsNHE6	526	L	G	V	P	E	566
CeNHE1	440	Q	-	R	L	E	462
ANHX1	477	D	S	F	I	E	516
ScNHX1	525	S	S	I	Q	T	565
HsNHE6	566	K	P	L	L	T	606
CeNHE1	462	V	P	V	T	M	500
ANHX1	516	T	V	H	Y	Y	538
ScNHX1	565	N	L	P	N	I	605
HsNHE6	606	D	S	D	L	I	646
CeNHE1	500	L	K	-	-	-	540
ANHX1	538	K	A	-	-	-	538
ScNHX1	605	L	G	T	I	F	633
HsNHE6	646	D	A	L	R	E	669
CeNHE1	540	S	T	R	V	R	541
ANHX1	538	S	L	Q	D	S	538
ScNHX1	633	P	L	N	L	D	633
HsNHE6	669	P	L	N	L	D	669
CeNHE1	541	D	-	-	-	-	541



Figure 2(b)-1

ANH1	MLDS	LVS	KLP	P	S	L	S	T	S	D	H	A	S	V	V	A	L	N	L	F	V	A	L	L	C	A	C	I	V	L	G	H	L	L	40											
ANH2	MS	I	G	L	T	E	F	V	T	N	K	L	A	A	E	H	P	Q	V	I	S	V	F	I	A	L	C	L	L	V	I	G	H	L	L	40										
ANH3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	V	L	S	F	V	L	G	H	V	L	13									
ANH1	EE	NR	-	-	WM	NE	-	-	-	S	I	T	A	L	L	I	G	L	G	T	G	V	T	I	L	L	I	S	K	G	K	S	-	H	L	L	V	F	77							
ANH2	EE	NR	-	-	WM	NE	-	-	-	S	I	T	A	L	L	I	G	L	G	A	S	G	T	V	I	L	L	I	S	K	G	K	S	-	H	L	L	V	F	77						
ANH3	RR	HR	F	H	Y	L	P	E	-	A	S	G	S	L	L	I	G	L	I	-	V	G	I	L	A	N	I	S	D	T	E	T	S	I	R	T	W	F	N	F	53					
ANH1	SE	D	L	F	F	I	Y	L	L	P	P	I	F	N	A	G	F	Q	-	V	K	K	Q	F	F	R	N	F	V	T	I	M	L	F	G	A	V	G	117							
ANH2	DE	E	L	F	F	I	Y	L	L	P	P	I	F	N	A	G	F	Q	-	V	K	K	Q	F	F	H	N	F	L	T	I	M	S	F	G	V	I	G	117							
ANH3	HE	E	F	F	F	L	F	L	L	P	P	I	F	Q	S	G	F	S	-	L	Q	P	K	P	F	F	S	N	F	G	A	I	V	T	F	A	I	I	G	93						
ANH1	T	I	S	C	T	I	S	L	-	G	V	T	Q	F	F	K	K	L	D	-	I	G	T	F	D	L	G	D	Y	L	A	I	G	A	I	F	A	A	T	D	157					
ANH2	V	F	I	S	T	V	I	S	F	-	G	T	W	W	L	F	P	K	L	G	-	F	K	G	L	S	A	R	D	Y	L	A	I	G	T	I	F	S	T	D	157					
ANH3	T	F	V	A	S	V	V	T	G	-	L	V	Y	L	G	G	S	M	Y	L	-	M	Y	K	L	P	F	V	E	C	L	M	F	G	A	L	I	S	A	T	D	133				
ANH1	S	V	C	T	L	Q	V	L	N	Q	-	D	E	T	P	L	-	L	Y	S	L	-	V	F	G	E	G	V	V	N	D	A	-	T	S	V	V	V	F	N	A	I	Q	196		
ANH2	T	V	C	T	L	Q	I	L	H	Q	-	-	D	E	T	P	L	-	L	Y	S	L	-	V	F	G	E	G	V	V	N	D	A	-	T	S	V	V	L	F	N	A	V	Q	196	
ANH3	P	V	T	V	L	S	I	F	Q	D	-	-	V	G	T	D	V	N	L	Y	A	L	-	V	F	G	E	S	V	L	N	D	A	-	M	A	I	S	L	Y	R	T	M	S	173	
ANH1	S	F	D	L	T	H	L	N	H	E	-	-	A	A	F	H	L	L	G	N	F	L	-	Y	L	F	L	L	S	T	L	L	G	-	A	A	T	G	L	I	S	A	Y	V	236	
ANH2	K	I	Q	F	E	S	L	T	G	W	-	-	T	A	L	Q	V	F	G	N	F	L	-	Y	L	F	S	T	S	T	L	L	G	-	I	G	V	G	L	I	T	S	F	V	236	
ANH3	L	V	N	R	Q	S	S	S	G	E	-	-	H	F	F	M	V	V	I	R	F	F	-	E	T	F	A	G	S	M	S	A	G	-	V	G	V	G	F	T	S	A	L	L	213	
ANH1	I	K	K	L	Y	F	G	-	R	H	-	-	S	T	D	R	E	V	A	L	M	M	-	L	M	A	Y	L	S	Y	M	L	A	-	-	E	L	F	D	L	S	G	I	L	T	275
ANH2	L	K	T	L	Y	F	G	-	R	H	-	-	S	T	T	R	E	L	A	I	M	V	-	L	M	A	Y	L	S	Y	M	L	A	-	-	E	L	F	S	L	S	G	I	L	T	275
ANH3	F	K	Y	A	G	L	D	T	E	N	-	-	L	Q	N	L	E	C	C	L	F	V	-	L	F	P	Y	F	S	Y	M	L	A	-	-	E	G	V	G	L	S	G	I	V	S	253



Figure 2(b)-2

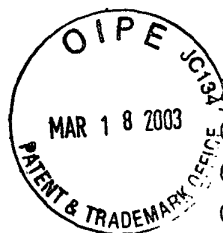
A _N HX1	V F F C G I V M S H	Y T W H N V T E S S	R I T T K H T F A T	L S F L A E T F I F	315
A _N HX2	V F F C G V L M S H	Y A S Y N V T E S S	R I T S R H V F A M	L S F I A E T F I F	315
A _N HX3	I L F T G I V M K R	Y T F S N L S E A S	Q S F V S S F F H L	I S S L A E T F T F	293
A _N HX1	L Y V G M D - A L D	I D K W R S V S D T	P G T S I A V S S I	L M G L V M V G R A	354
A _N HX2	L Y V G T D - A L D	F T K W K T S S L S	F G G T L L G V S G V	I T A L V L L G R A	354
A _N HX3	I Y M G F D I A M E	Q H S W S H V G - -	F I L F S I V S S F	T D R Q - - - - -	325
A _N HX1	A F V F P L S F L S	N L A K K N Q - - S	E K I N F N M Q V V	I W W S G L M R G A	392
A _N HX2	A F V F P L S V L T	N F M N R H T E R N	E S I T F K H Q V I	I W W A G L M R G A	394
A _N HX3	- - - - -	- - - - -	- - - - -	- - - - -	325
A _N HX1	V S M A L A Y N K F	T R A G H T D V R G	N A I M I T S T I T	V C L F S T V V F G	432
A _N HX2	V S I A L A F K Q F	T Y S G V I L D P V	N A A M V T N T T I	V V L F T T L V F G	434
A _N HX3	- - - - -	- - - - -	- - - - -	- - - - -	325
A _N HX1	M L T K P L I S Y L	L P H Q N A T T S M	L S D D N T P K S I	H I P - - L L D Q D	470
A _N HX2	F L T K P L V N Y L	L P Q D A S H N T G	N R G K R T E P G S	P K E D A T L P L L	474
A _N HX3	- - - - -	- - - - -	- - - - -	- - - - -	325
A _N HX1	S F I E P S G N H N	V P R P D S I R G F	L T R P T R T V H Y	Y W R Q F D D S F M	510
A _N HX2	S F D E S A S T N F	N R A R D S I S L L	M E Q P V Y T I H R	Y W R K F D D T Y M	514
A _N HX3	- - - - -	- - - - -	- - - - -	- - - - -	325
A _N HX1	R P V F G G R G F V	P F V P G S P T E R	N P P D L S K A	538	
A _N HX2	R P I F G G P R R E	N Q P E C - - - -	- - - - -	529	
A _N HX3	- - - - -	- - - - -	- - - - -	325	



Figure 2(c)

ANH3 ANH4	40 40	GLIVGILANI GLIVGILANI	LPEASGSLLI LPEASGSLLI	HVLRRRHRFHY HVLRRRHRFHY	MLVLVSFVLG MLVLVSFVLG	ANHX3 ANHX4
ANH3 ANH4	80 80	GFSLQPKPFF GFSLQPKPFF	FLPPPIIFQS FLPPPIIFQS	FNFEHEFFFL FNFEHEFFFL	SDTETSIRTW SDTETSIRTW	ANHX3 ANHX4
ANH3 ANH4	120 120	MYLMYKLPFV MYLMYKLPFV	TGGLVYLGGS TGGLVYLGGS	IIGTFVASVV IIGTFVASVV	SNFGAIVTFA SNFGAIVTFA	ANHX3 ANHX4
ANH3 ANH4	160 160	YALVFGEVVL YALVFGEVVL	FQDVGTDVNL FQDVGTDVNL	ATDPVTVLSI ATDPVTVLSI	ECLMFGALIS ECLMFGALIS	ANHX3 ANHX4
ANH3 ANH4	200 200	RFETTFAGSM RFETTFAGSM	SGEHFFMVVI SGEHFFMVVI	TMSLVNRQSS TMSLVNRQSS	NDAMAISLYR NDAMAISLYR	ANHX3 ANHX4
ANH3 ANH4	240 232	LFVLPFYFSY VL-----	TENLQNECC FLIRCHMAKN	ALLFKYAGLD ALLSFLESSI	SAGVGVGFTS SAGVGVGFTS	ANHX3 ANHX4
ANH3 ANH4	280 232	EASQSFVSSF -----	MKRYTFSNLS -----	IVSILFTGIV -----	MLAEGVGLSG -----	ANHX3 ANHX4
ANH3 ANH4	320 232	GFILFSIVSS -----	AMEQHSWSHV -----	FTFIYMGFDI -----	FHLISSLAET -----	ANHX3 ANHX4
ANH3 ANH4					FTDRQ 325 ----- 232	

Figure 5(a)-1



ATGTTGGATTCTCTAGTGTGCGAACTGCCTTCGTTATCGACATCTGATCAC
GCTTCTGTGGTTGCGTTGAATCTCTTTGTTGCACTTCTTTGTGCTTGTATT
GTTCTTGGTCATCTTTTGGGAAGAGAATAGATGGATGAACGAATCCATCACC
GCCTTGTTGATTGGGCTAGGCACTGGTGTACCATTTTGTGATTAGTAAA
GGAAAAAGCTCGCATCTTCTCGTCTTTAGTGAAGATCTTTTCTTCATATAT
CTTTTGCCACCCATTATATTCAATGCAGGGTTTCAAGTAAAAAAGAAGCAG
TTTTTCCGCAATTTCTGACTATTATGCTTTTTTGGTGCTGTTGGGACTATT
ATTTCTTGCACAATCATATCTCTAGGTGTAACACAGTTCTTTAAGAAGTTG
GACATTGGAACCTTTGACTTGGGTGATTATCTTGCTATTGGTGCCATATTT
GCTGCAACAGATTCAAGTATGTACACTGCAGGTTCTGAATCAAGACGAGACA
CCTTTGCTTTACAGTCTTGTATTTCGGAGAGGGTGTGTGAATGATGCAACG
TCAGTTGTGGTCTTCAACGCGATTTCAGAGCTTTGATCTCACTCACCTAAAC
CACGAAGCTGCTTTTCATCTTCTTGAACTTCTTGTATTTGTTTCTCCTA
AGTACCTTGCTTGGTGCTGCAACCGGTCTGATAAGTGCGTATGTTATCAAG
AAGCTATACTTTGGAAGGCACTCAACTGACCGAGAGGTTGCCCTTATGATG
CTTATGGCGTATCTTTCTTATATGCTTGCTGAGCTTTTCGACTTGAGCGGT
ATCCTCACTGTGTTTTTCTGTGGTATTGTGATGTCCCATTACACATGGCAC
AATGTAACGGAGAGCTCAAGAATAACAACAAAGCATAACCTTTGCAACTTTG
TCATTTCTTGCGGAGACATTTATTTTCTTGTATGTTGGAATGGATGCCTTG
GACATTGACAAGTGGAGATCCGTGAGTGACACACCGGGAACATCGATCGCA
GTGAGCTCAATCCTAATGGGTCTGGTCATGGTTGGAAGAGCAGCGTTTCGTC
TTTCCGTTATCGTTTCTATCTAACTTAGCCAAGAAGAATCAAAGCGAGAAA
ATCAACTTTAACATGCAGGTTGTGATTTGGTGGTCTGGTCTCATGAGAGGT
GCTGTATCTATGGCTCTTGACATAACAAGTTTACAAGGGCCGGGCACACA
GATGTACGCGGAATGCAATCATGATCACGAGTACGATAACTGTCTGTCTT
TTTAGCACAGTGGTGTTTGGTATGCTGACCAAACCACTCATAAGCTACCTA
TTACCGCACCAGAACGCCACCACGAGCATGTTATCTGATGACAACACCCCA
AAATCCATACATATCCCTTTGTTGGACCAAGACTCGTTCATTGAGCCTTCA
GGGAACCACAATGTGCCTCGGCCTGACAGTATACGTGGCTTCTTGACACGG
CCCCTCGGAACCGTGCATTACTAACTGGAGACAATTTGATGACTCTTTCA
TGCGACCCGTCTTTGGAGGTCGTGGCTTTGTACCCTTTGTTCCAGGTTCTC
CAACTGAGAGAAACCCTCCTGATCTTAGTAAGGCTTGAGGGTAACGTGGAA
GAAAAGCTTTGATTTTTTTTTTGGTAGAAAAGGGTGATTCAAATTATGCTTTT
GTGTAAATTATCCATTTGTAATATTGTTTGTGAGGACAGAAATCTGTCCTA
ACGTTTTGAGAGCAGAAAGCAAAACATGGCAACTTTGAAGTGTGTTGATTGA
TGTATGTAATTATATTCATATTTGTTTTGTTGTAACACAACTACACATTT
GTTTATGTTTTGAATTTGGTTTTTGCTTCGAAAAAAAAAAAAAAAAAAAA

Figure 5(a)-2



MLDSLVS KLPSLSTSDHASVVALNLFVALLCACIVLGHLLEENRWMNESIT
ALLIGLGTGVTILLISKGKSSHLLVFESEDLFFIYLLPPIIFNAGFQVKKKQ
FFRNFTIMLFGAVGTIISCTIISLGVTOFFKKLDIGTFDLGDYLAIGAIF
AATDSVCTLQVLNQDETPLYSLVFGGEGVNDATSVVVFNAIQSFDLTHLN
HEAAFHLLGNFLYLFLLSTLLGAATGLISAYVIKKLYFGRHSTDREVALMM
LMAYLSYMLAELFDLSGILTVFFCGIVMSHYTWHNVTESSRITTKHTFATL
SFLAETFI FLYVGMDALDIDKWRVSVDTPGTSIAVSSILMGLVMVGRAAFV
FPLSFLSNLAKKNQSEKINFNMQVVIWWSGLMRGAVSMALAYNKFTRAGHT
DVRGNAIMITSTITVCLFSTVVFGMLTKPLISYLLPHQNATTSMLSDDNTP
KSIHIPLLDQDSFIEPSGNHNVPRPDSIRGFLTRPTRNRALLTGDNLMTLS
CDPSLEVVALYPLFQVLQLRETLILLVRLEGNVEEKL

Figure 5(b)-1

1 TTCGCGGCCGCGTCTCTCTCTATTTCCAGTAAAAAATCGAAATTTTC
47 GTATAATTTCTCAGTCCCGTAATTTTCTCCTTTTTTTTCTTCCC
92 CAATTCCTTCAATTTTTCGAATTCGCCTCTCTGTTTCGTTCCCTCGT
137 AGACGAAGAAGAAGAAGAATCTCAGGTTTTAGCTTTCGAAGCTTC
182 CAAAATTTTGAATTTTGATCTTCTGGGCTCTTTTGTAATCAGAC
227 TGAAGATATTTAGATTACCCAGAAGTTGTTCAAGGAATGGTTTCA
272 GTGGACAGCACGGAAAGATAAAAGAGACTTTTTTTTCCAGATTTT
317 GCTGATCCAAAATCTGAATAGTTGTTTCATGTTCTTGGATCAAATC
362 TGGAAAGAGGAAGTTTGTGGATCTAGAAGAAGATAACAATGTTG
M L 2
407 GATTCTCTAGTGTCGAAACTGCCTTCGTTATCGACATCTGATCAC
D S L V S K L P S L S T S D H 17
452 GCTTCTGTGGTTGCGTTGAATCTCTTTGTTGCACTTCTTTGTGCT
A S V V A L N L F V A L L C A 32
497 TGTATTGTTCTTGGTCATCTTTTGGGAAGAGAATAGATGGATGAAC
C I V L G H L L E E N R W M N 47
542 GAATCCATCACCGCCTTGTTGATTGGGCTAGGCACTGGTGTACC
E S I T A L L I G L G T G V T 62
587 ATTTTGTGATTAGTAAAGGAAAAAGCTCGCATCTTCTCGTCTTT
I L L I S K G K S S H L L V F 77
632 AGTGAAGATCTTTTCTTCATATATCTTTTGCCACCCATTATATTC
S E D L F F I Y L L P P I I F 92
677 AATGCAGGGTTTCAAGTAAAAAAGAAGCAGTTTTTCCGCAATTTTC
N A G F Q V K K K Q F F R N F 107
722 GTGACTATTATGCTTTTTTGGTGCTGTTGGGACTATTATTCTTGC
V T I M L F G A V G T I I S C 122
767 ACAATCATATCTCTAGGTGTAACACAGTTCTTTAAGAAGTTGGAC
T I I S L G V T Q F F K K L D 137
812 ATTGGAACCTTTGACTTGGGTGATTATCTTGCTATTGGTGCCATA
I G T F D L G D Y L A I G A I 152
857 TTTGCTGCAACAGATTCAGTATGTACACTGCAGGTTCTGAATCAA
F A A T D S V C T L Q V L N Q 167
902 GACGAGACACCTTTGCTTTACAGTCTTGTATTCCGAGAGGGTGT
D E T P L L Y S L V F G E G V 182
947 GTGAATGATGCAACGTCAGTTGTGGTCTTCAACGCGATTTCAGAGC
V N D A T S V V V F N A I Q S 197



Figure 5(b)-2

992 TTTGATCTCACTCACCTAAACCACGAAGCTGCTTTTCATCTTCTT
F D L T H L N H E A A F H L L 212
1037 GGAAACTTCTTGTATTTGTTTCTCCTAAGTACCTTGCTTGGTGCT
G N F L Y L F L L S T L L G A 227
1082 GCAACCGGTCTGATAAGTGC GTATGTTATCAAGAAGCTATACTTT
A T G L I S A Y V I K K L Y F 242
1127 GGAAGGCACTCAACTGACCGAGAGGTTGCCCTTATGATGCTTATG
G R H S T D R E V A L M M L M 257
1172 GCGTATCTTTCTTATATGCTTGCTGAGCTTTTCGACTTGAGCGGT
A Y L S Y M L A E L F D L S G 272
1217 ATCCTCACTGTGTTTTCTGTGGTATTGTGATGTCCCATTACACA
I L T V F F C G I V M S H Y T 287
1262 TGGCACAATGTAACGGAGAGCTCAAGAATAACAACAAAGCATAACC
W H N V T E S S R I T T K H T 302
1307 TTTGCAACTTTGTCAATTTCTTGCGGAGACATTTATTTTCTTGTAT
F A T L S F L A E T F I F L Y 317
1352 GTTGAATGGATGCCTTGGACATTGACAAGTGGAGATCCGTGAGT
V G M D A L D I D K W R S V S 332
1397 GACACACCGGGAACATCGATCGCAGTGAGCTCAATCCTAATGGGT
D T P G T S I A V S S I L M G 347
1442 CTGGTCATGGTTGGAAGAGCAGCGTTCGTCTTCCGTTATCGTTT
L V M V G R A A F V F P L S F 362
1487 CTATCTAACTTAGCCAAGAAGAATCAAAGCGAGAAAATCAACTTT
L S N L A K K N Q S E K I N F 377
1532 AACATGCAGGTTGTGATTTGGTGGTCTGGTCTCATGAGAGGTGCT
N M Q V V I W W S G L M R G A 392
1577 GTATCTATGGCTCTTG CATAACAAGTTTACAAGGGCCGGGCAC
V S M A L A Y N K F T R A G H 407
1622 ACAGATGTACGCGGGAATGCAATCATGATCACGAGTACGATAACT
T D V R G N A I M I T S T I T 422
1667 GTCTGTCTTTTTAGCACAGTGGTGGTGGTATGCTGACCAAACCA
V C L F S T V V F G M L T K P 437
1712 CTCATAAGCTACCTATTACCGCACCAGAACGCCACCACGAGCATG
L I S Y L L P H Q N A T T S M 452
1757 TTATCTGATGACAACACCCCAAATCCATACATATCCCTTTGTTG
L S D D N T P K S I H I P L L 467

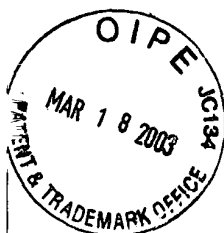


Figure 5(b)-3



1802	GACCAAGACTCGTTCATTGAGCCTTCAGGGAACCACAATGTGCCT	
	D Q D S F I E P S G N H N V P	482
1847	CGGCCTGACAGTATACGTGGCTTCTTGACACGGCCCACTCGGAAC	
	R P D S I R G F L T R P T R N	497
1892	CGTGCATTACTAACTGGAGACAATTTGATGACTCTTTCATGCGAC	
	R A L L T G D N L M T L S C D	512
1937	CCGTCTTTGGAGGTCGTGGCTTTGTACCCTTTGTTCCAGGTTCTC	
	P S L E V V A L Y P L F Q V L	527
1982	CAACTGAGAGAAACCCTCCTGATCTTAGTAAGGCTTGAGGGTAAC	
	Q L R E T L L I L V R L E G N	542
2027	GTGGAAGAAAAGCTTTGA	
	V E E K L	547

Figure 8 (a)

[SEQ ID NO:21]

1 mpdskhwil lfrrdgdddd ddgqdpalqe lysswalfil lvlligallt
51 syyvqskkir aihetvisvf vgmvgliir vspgliiqnm vsfhstyffn
101 vllppiilns gyelhqsnff rnigtltfa fagtfisavt lgvlvyifsf
151 lnfenlsmtf vealsmgatl satdpvtvla ifnsykvdqk lytiifgesi
201 lndavaivmf etlqqfqgkt lhfftlfsgl gifiiitffis lligvsigli
251 talllkysyl rrypsiesci illmaytsyf fsngchmsgv vsllfcgitl
301 khyaffnmsy kaklstkyvf rvlaqlsenf ifiylgmslf tqvdlvykpi
351 filittvavt asrymnvfp1 snllnkfhrq rngnlidhip ysyqmm1fwa
401 glrgavgval aagfegenaq tlrattlvvv vltliifggt tarmleilhi
451 etgvaadvds dteigmlpwq qspefdlens amelsdasae pvvvdqqftt
501 ehfdegniap t1skkvsstf eqyqraagaf nqffhssrdd qaqwltrfde
551 evikpvller dnlkngtkk



Figure 8 (b)

[SEQ ID NO:22]

1 mlskvllnia fkvllttakr avdpdddel lpspdlpgsd dpiagdpdvd
51 lnpvteemfs swalfimlll lisalwssyy ltqkriravh etvlsifygm
101 vigliirmsp ghyiqdvtvf nssyffnvll ppiilnsgye lnqvnffnm
151 lsilifaipg tfisavvigi ilyiwtflgl esidisfada msvgatlsat
201 dpvtilsifn aykvdpklyt iifgesllnd aisivmfetc qkfhhgqpatf
251 ssvfegaglf lmtfsvslli gvliligilval llkhthirry pqiesclill
301 iayesyffsn gchmsgivsl lfcgitlkhy aaynmsrrsq itikyifqll
351 arlsenfifi ylglelftv elvykpllii vaaisicvar wcavfplsqr
401 vnwiyrvkti rmsgitgen isvpdeipyn yqmmftwagl rgavgvalal
451 giggeykftl latvlvvvvl tviifggta gmlevlnikt gciseedtsd
501 defdieapra inllngssiq tdlgpysdnn spdisidqfa vssnknlpnn
551 isttggntfg glnetentsp nparssmdkr nlrcklgtif nsdsqwfqnf
601 deqvlkpvl dnvspslqds atqspadfss qnh

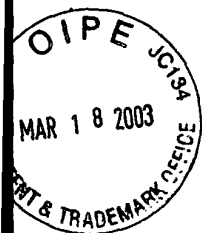


Figure 8 (c)

[SEQ ID NO:23]

1 caagaagcta tacattggaa ggcattctac tgaccgtgag gttgccctta
51 tgatgctcat ggcttacctt tcatatatgc tggctgagtt gctagatttg
101 agcggcattc tcaccgtatt cttctgtggt attgtaatgt cacattacac
151 ttggcataac gtcacagaga gttcaagagt tacaacaaag cacgcatttg
201 caactctgtc cttcattgct gagacttttc tcttcctgta tggttgggatg
251 gatgcattgg atattgaaaa atgggagntt nccagtgaca gacctggnaa
301 atccattngg gtaagctcaa ttttgctagg gattgggtcc tgattggaag
351 ngctgctttt gnaattcccc tggtggtc

Figure 8 (d)

[SEQ ID NO:24]

1 gtttggtaat tggaggaggt ggagtaatgg agctcgggtt ggggatgggg
51 atggggctgg gcgacccgnc tgcggactac ggctcgatcg cggcgggtggg
101 gatgttcgtg gcgctcatct gcgtctgcat cgtcgtcggc cacctcctcg
151 aggagagccg atggatgaac gagtccatca ccgcgctaata catcgggttg
201 ggtacttgga ggagtgnntt tgnatggtgt cgagctggaa gcactcggna
251 tactggtggt cagcgagg



Figure 8 (e)

[SEQ ID NO:25]

1 acattccctg aaagnactgc tggacntttg agggctcgga tgcctgtaga
51 tccaggactc aaaggatgnt gagctagagg ttgttgggat ggtgaagttt
101 gcttaccaag ggccatttac attgtctggc atcaaactat gccagccac
151 tgatggcacg gctcagttta atgaggctgg ccacaccttc tccagtggga
201 gttatctgtg catctaattg gtaccttctt tgtattgtag ttgttacttt
251 acccttgatt tgttcggttt gcttctaaag caggttgtga aattcctatt
301 gtatgtngtg acgcttggtt gttttttgag gctggaaatt acatcatggt
351 tttgatttgt ctattaaaaa aaaaaaaaaa

Figure 8 (f)

[SEQ ID NO:26]

1 gtcaaaaactc atccctcctc ttccatttgc atattcttct ttatcatctt
51 ttcttcccta aattagagtc tacccttcg cccatagtct ttgacaccct
101 tttcaaaatt ctagaacaag aattttattc ttcatatata tatatatata
151 tatccaatta accatctcaa tctcatattc acatatacct cataaaccat
201 ccataacatc cttaaaaacc ctctaagccc tttcaaaactt tgatttghtaa
251 ttgtttctct tataagtctt aacctgcaca aatcaatttt aatttcttat
301 gttcatatag ttatgaatga ttgaaaaaaa cacaaatgac tccagttatc
351 tgtgagatct ctatgataaa ctctactctc cagacgcagg acacatttag
401 ttcaatcttt ctctgttggt ttctctact ggttctatat tttctcatga
451 attattaatt aatcctatat tctttctttt caatacaaat ttagtttcat
501 taattctatc aacataatca attaaactac atagttagaa aaatagtact
551 attaccacga tcaactcaaag ttttttagtt tttaacaaac antctg

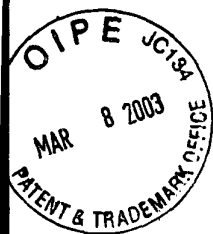
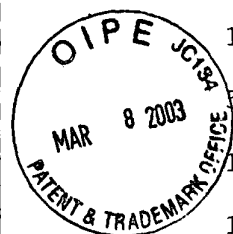


Figure 8 (g)

[SEQ ID NO:27]



1 atttacatgg ttataccagt tatcttgagc acttatgcat catccagtga
51 tcagttttgc ttccattcag actgatgggt ctggcagaag taatgtattc
101 tgggtggactt acatctatca gcgatgatga aacttgatga tcagtttttt
151 tagttgaaaa attctgcaag aacagctact taatgctcta ttgtgtatcg
201 caggcacaca tcagctgctg atgtctgcta tacttctgta ctctcactat
251 agctcatcta tgacgtctag acatgctagc gtatgtgtan nnnacatcgc
301 gctagtatgt atactctcac atcatatgct actgttctat atagaactat
351 gtgatagcta ctgctatact gctgtcatac agagtcccgt taatatcaat
401 gctattttgc tttcctcaaa gaaaaaagga aatgactttc cttttgatta
451 tatatttgat ccagggtttc ggcttgctga ctaagcctct gattaatctc
501 ctcgctccac caagacctgg ca

Figure 8 (h)

[SEQ ID NO:28]

1 tttccgttat cgtttctatc taacttagcc aagaagaatc aaagcgagaa
51 aatcaacttt aacatgcagg ttgtgatttg gtgggtctggt ctcatgagag
101 gtgctgtatc tatggctctt gcatacaaca agttttacaag ggccggggcac
151 acagatgtac gnggggaatgc aatcatgatc acgngtacgn taactgtctg
201 tnttttttagc acagtgggtgt ttggtatgct gaccaaacca ntcataagct
251 acctatttac cgnaccanga accgtcatca acgnggcatg tttatcttgn
301 attncaaata acccnaanaa tccnatacca